

AD-A159 575

DEVELOPMENT OF MILHY FOR OPERATIONAL FORECASTING(U)  
BRISTOL UNIV (ENGLAND) M G ANDERSON SEP 85  
R/D-4390-EN-01 DAJA45-85-C-0011

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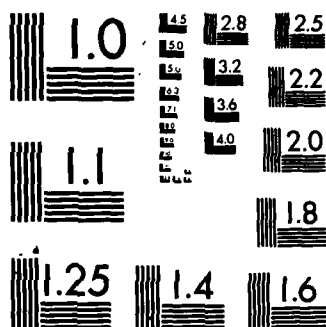
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Development of MILHY for operational forecasting

AD-A159 575

Principal Investigator : Dr. M.G. Anderson  
Contractor : Dr. M.G. Anderson  
Contract Number : DAJA45-85-C-0011

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Second Interim Report

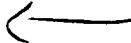
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### Development of MILHY for operational forecasting

Following the last report in June 1985 (the first interim report), there ~~have been~~ <sup>were</sup> two major pieces of work undertaken:

- (i) 1) A full version of ~~our~~ <sup>the</sup> modified MILHY package has been forwarded to Waterways experiment Station, Vicksburg, Mississippi, together with test data sets and full documentation; *a.d.*
- (ii) 3) A visit has been made to Frankfurt, West Germany, to liaise with the 517 Engineering Group of the U.S. Army. During that visit, we sought to identify watersheds in the Fulda area that would provide a suitable data base for further tests of the model. A further visit is planned in October to collaborate with the 517 Engineering Group in the acquisition of streamflow data and topographic and soil maps. 

One of the principal difficulties in obtaining suitable data for testing purposes was thought to be the large number of structures on the relatively small rivers in the Fulda area. Figure 1 illustrates the type of structure we found. However, our field work showed that these structures were nothing like as numerous as mapped evidence would indicate. In consequence, initial model testing in this area will require less field monitoring in terms of structures than originally envisaged.

### Proposed work schedule March 1986 - March 1988

The terms of the original one year contract (20 March 1985 - 20 March 1986) makes it desirable now to request funding for the final two years of the project (commencing 20 March 1986). In these two years, it is proposed to:

- i) Configure an optimal version of MILHY with our revised soil water module. This will involve continued close collaboration with W.E.S., having within the last two months forwarded a copy of our program to Vicksburg.
- ii) Enhancement of the tactical elements - including pre-processing of input data to optimise the program run-time.
- iii) Continue development of the soil moisture forecasting segment in the context of tactical forecasting needs.

The research budget for this work would remain exactly as per the original proposal:

Research budget proposals

|  | FY86         | FY87         | FY88         |
|--|--------------|--------------|--------------|
| Salaries*<br>(two research assistants) | \$17K        | \$35K        | \$18K        |
| Travel                                 | \$ 2K        | \$ 4K        | \$ 2K        |
| Computer charges                       | \$ 1K        | \$ 2K        | \$ 1K        |
| Report production                      |              |              | \$ 2K        |
|  | <u>\$20K</u> | <u>\$41K</u> | <u>\$23K</u> |

Total : \$84,000

\* INCLUSIVE OF ALL UNIVERSITY OVERHEADS  
based upon start date of the 21 March 1986

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Dr. M.G. Anderson  
Principal Investigator



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Figure 1

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